

What is claimed is:

1           1. A method for delivering a communications service  
2 feature to a party communicating through a network,  
3 comprising the steps of:  
4           determining if the party is a subscriber of the  
5 communications service feature based on an identifier  
6 associated with the party and a first database containing a  
7 subset of subscriber identifiers;  
8           verifying that the identifier associated with the party  
9 is in the subset of identifiers that would be included in  
10 said first database if the party is a subscriber;  
11           for those identifiers that are not in said first  
12 database and that are not in the subset of identifiers that  
13 would be included in said first database, querying a second  
14 database containing all subscriber identifiers to determine  
15 if the party is a subscriber; and  
16           providing the communications service feature if the  
17 party is a subscriber.

1           2. The method of claim 1, wherein said network is the  
2 public switched telephone network.

1           3. The method of claim 2, wherein the identifiers are  
2 telephone numbers.

1           4. The method of claim 3, wherein said communications

2 service feature is Positive Call Processing.

1 5. The method of claim 3, wherein said first database  
2 contains subscriber telephone numbers for a number of area  
3 codes, and the subset of telephone numbers that would be  
4 included in said first database if the party is a subscriber  
5 are subscriber telephone numbers having one of said number of  
6 area codes.

1 6. The method of claim 5, wherein the telephone numbers  
2 that are not in said first database and that do not have one  
3 of said number of area codes represent calls that are not  
4 associated with a particular geographic area.

1 7. The method of claim 3, wherein said step of  
2 determining is performed using an automatic number  
3 identification trigger table in a communications switch.

1 8. The method of claim 5, wherein said step of  
2 verifying is performed using an access number plan area table  
3 in a communications switch.

1 9. The method of claim 4, wherein said communications  
2 service feature is provided by a provider and further  
3 comprising the step of:  
4 verifying that the provider controls information for  
5 billing the party and wherein said step of providing positive

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6 call processing is only performed if the party is a  
7 subscriber and the provider controls information for billing  
8 the party.

1 10. The method of claim 9, wherein said step of  
2 verifying that the provider controls information for billing  
3 the party is based on a transaction capabilities part begin  
4 message from a No. 4 electronic switching system switch.

1 11. The method of claim 6, further comprising the step  
2 of:  
3 determining if a wireless telephone number for which the  
4 communications service feature can be provided is associated  
5 with the party and wherein said step of providing the  
6 communication service feature is only performed if a wireless  
7 telephone number for which the communications service feature  
8 can be provided is associated with the party and the party is  
9 a subscriber.

1 12. The method of claim 11, wherein the determination  
2 is based on an information indicator/originating line  
3 information code indicating type 2A access.

1 13. An apparatus delivering a communications service  
2 feature to a party communicating through a network,  
3 comprising:  
4 means for determining if the party is a subscriber of

5 the communications service feature based on an identifier  
6 associated with the party and a first database containing a  
7 subset of subscriber identifiers;

8 means for verifying that the identifier associated with  
9 the party is in the subset of identifiers that would be  
10 included in said first database if the party is a subscriber;

11 means for querying a second database containing all  
12 subscriber identifiers to determine if the party is a  
13 subscriber for those identifiers that are not in said first  
14 database and that are not in the subset of identifiers that  
15 would be included in said first database; and

16 means for providing the communications service feature  
17 if the party is a subscriber.

1 14. The apparatus of claim 13, wherein said network is  
2 the public switched telephone network.

1 15. The apparatus of claim 14, wherein the identifiers  
2 are telephone numbers.

1 16. The apparatus of claim 15, wherein said  
2 communications service feature is Positive Call Processing.

1 17. The apparatus of claim 15, wherein said first  
2 database contains subscriber telephone numbers for a number  
3 of area codes, and the subset of telephone numbers that would  
4 be included in said first database if the party is a

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1 subscriber are telephone numbers having one of said number of  
2 area codes.

1 18. The apparatus of claim 17, wherein the telephone  
2 numbers that are not in said first database and that do not  
3 have one of said number of area codes represent wireless  
4 calls.

1 19. The apparatus of claim 15, wherein said means for  
2 determining uses an automatic number identification trigger  
3 table in a communications switch.

1 20. The apparatus of claim 17, wherein said means for  
2 verifying uses an access number plan area table in a  
3 communications switch.

1 21. The apparatus of claim 16, wherein said  
2 communications service feature is provided by a provider and  
3 further comprising:

4 means for verifying that the provider controls  
5 information for billing the party and wherein said means for  
6 providing only provides Positive Call Processing if the party  
7 is a subscriber and the provider controls information for  
8 billing the party.

1 22. The apparatus of claim 21, wherein said means for  
2 verifying that the provider controls information for billing

3 the party is based on a transaction capabilities part begin  
4 message from a communications switch.

1 23. The apparatus of claim 18, further comprising:  
2 means for determining that a wireless telephone number  
3 for which the communications service feature can be provided  
4 is associated with the party and wherein said means for  
5 providing only provides the communications service feature if  
6 a wireless telephone number for which the communications  
7 service feature can be provided is associated with the party  
8 and the party is a subscriber.

1 24. The apparatus of claim 23, wherein the  
2 determination is based on an information  
3 indicator/originating line information code indicating type  
4 2A access.

1 25. A system for determining if a party communicating  
2 through the public switched telephone network is a subscriber  
3 of a communications service feature, comprising:  
4 a communications switch serving a number of area codes,  
5 comprising:  
6 an area code database containing each of said  
7 number of area codes, and  
8 a first database containing the subset of  
9 subscriber telephone numbers having an area code equal to one  
10 of said number of area codes;

11 a second database containing all subscriber telephone  
12 numbers; and

13 a processor in communication with said communications  
14 switch and said second database, wherein said processor  
15 queries said second database to determine if the party is a  
16 subscriber when a telephone number associated with the party  
17 is not in said first database and an area code associated  
18 with said party is not in said area code database.

26. The system of claim 25, wherein said communications  
service feature is Positive Call Processing.

1 27. The system of claim 26, wherein said first database  
2 is an automatic number identification trigger table.

1 28. The system of claim 27, wherein said area code  
2 database is an access number plan area table.

1 29. The system of claim 27, wherein said communications  
2 service feature is provided by a provider and said processor  
3 verifies that the provider controls information for billing  
4 the party.

1 30. The system of claim 29, wherein said processor  
2 determines if a wireless telephone number for which the  
3 communications service feature can be provided is associated  
4 with the party.

1        31. The system of claim 30, wherein the determination  
2        is based on an information indicator/originating line  
3        information code indicating type 2A access.

1        32. A computer readable medium having stored thereon  
2        instructions which, when executed by a processor, cause the  
3        processor to perform steps for delivering a communications  
4        service feature to a party communicating through a network,  
5        said steps comprising:

6        determining if the party is a subscriber of the  
7        communications service feature based on a telephone number  
8        associated with the party and a first database containing a  
9        subset of subscriber telephone numbers;

10        verifying that the telephone number associated with the  
11        party is in the subset of telephone numbers that would be  
12        included in said first database if the party is a subscriber;

13        for those telephone numbers that are not in said first  
14        database and that are not in the subset of telephone numbers  
15        that would be included in said first database, querying a  
16        second database containing all subscriber telephone numbers  
17        to determine if the party is a subscriber; and

18        providing the communications service feature if the  
19        party is a subscriber.

1        33. A method for delivering a communications service  
2        feature to a party communicating through a network,



3 comprising the steps of:

4       determining if the party is a subscriber of the  
5 communications service feature based on a telephone number  
6 associated with the party and a first database containing a  
7 subset of subscriber telephone numbers based on the area  
8 codes associated with said subscriber telephone numbers;

9       verifying that the telephone number associated with the  
10 party has an area code such that the telephone number would  
11 be included in said first database if the party is a  
12 subscriber;

13       for those telephone numbers that represent calls not  
14 associated with a particular geographic region, as indicated  
15 by a telephone number not being in said first database and  
16 not being in the subset of telephone numbers that would be  
17 included in said first database, querying a second database  
18 containing all subscriber telephone numbers to determine if  
19 the party is a subscriber; and

20       providing the communications service feature if the  
21 party is a subscriber.

1       34. The method of claim 33, wherein said network is the  
2 public switched telephone network.

1       35. The method of claim 34, wherein said communications  
2 service feature is Positive Call Processing.

1       36. An apparatus for delivering a communications

2 service feature to a party communicating through a network,  
3 comprising:

4 means for determining if the party is a subscriber of  
5 the communications service feature based on a telephone  
6 number associated with the party and a first database  
7 containing a subset of subscriber telephone numbers based on  
8 the area codes associated with said subscriber telephone  
9 numbers;

10 means for verifying that the telephone number associated  
11 with the party has an area code such that the telephone  
12 number would be included in said first database if the party  
13 is a subscriber;

14 for those telephone numbers that represent calls not  
15 associated with a particular geographic region, as indicated  
16 by a telephone number not being in said first database and  
17 not being in the subset of telephone numbers that would be  
18 included in said first database, means for querying a second  
19 database containing all subscriber telephone numbers to  
20 determine if the party is a subscriber; and

21 means for providing the communications service feature  
22 if the party is a subscriber.

1 37. The apparatus of claim 36, wherein said network is  
2 the public switched telephone network.

1 38. The apparatus of claim 37, wherein said  
2 communications service feature is Positive Call Processing.